40. The method of claim 39, wherein said semiconductor film comprises a metal.

41. The method of claim 37, wherein said thin film transistor is a top-gate type thin film transistor.

42. The method of claim 37, wherein said laser light is a pulsed excimer laser.

43. The method of claim 42, wherein said step of irradiating comprises pulsing said excimer laser ten times.

44. The method of claim 37, wherein said thin film transistor is one of a column driver and a scan driver.

45. The method of claim 37, further comprising the step of introducing a dopant impurity to said semiconductor film before said irradiating step.

46. A method for fabricating a thin film transistor device having a polycrystalline semiconductor thin film to form a channel region, and a gate electrode which intersects the channel region, comprising the steps of:

providing a structure comprising a semiconductor thin film separated by a gate insulating layer from a gate electrode on an insulating substrate; and

irradiating the semiconductor thin film with a laser light having an elongated irradiation area while relatively moving said laser light along a scan direction which is parallel to the channel region.

47. The method of claim 46, wherein said gate electrode is irradiated on an upper side.

48. The method of claim 46, wherein said irradiating step comprises moving the laser light.

49. The method of claim 46, wherein said irradiating step comprises partially overlapping irradiation of the laser light.

50. The method of claim 46, further comprising the step of heating said semiconductor thin film.

51. The method of claim 50, wherein said semiconductor thin film comprises a metal.

52. The method of claim 46, wherein said thin film transistor is a top-gate type thin film transistor.

53. The method of claim 46, wherein said laser light is a pulsed excimer laser.

54. The method of claim 53, wherein said step of irradiating comprises pulsing said excimer laser ten times.

55. The method of claim 46, wherein said thin film transistor is one of a column driver and a scan driver.

56. The method of claim 46, further comprising the step of introducing a dopant impurity to said semiconductor thin film before said irradiating step.

57. A method for fabricating a thin film transistor device having a polycrystalline semiconductor thin film to form a channel region, and a gate electrode which intersects the channel region, comprising the steps of:

providing a structure comprising a semiconductor thin film separated by a gate insulating layer from a gate electrode on an insulating substrate;

introducing a dopant impurity to said semiconductor thin film; and

irradiating the semiconductor thin film with a laser light having an elongated irradiation area while relatively moving said laser light along a scan direction which is parallel to the channel region in order to activate said dopant impurity.

58. The method of claim 57, wherein said gate electrode is irradiated on an upper side.

59. The method of claim 57, wherein said irradiating step comprises moving the laser light.

60. The method of claim 57, wherein said irradiating step comprises partially overlapping the laser light.

61. The method of claim 57, further comprising the step of heating said semiconductor thin film.

62. The method of claim 61, wherein said semiconductor thin film comprises a metal.

63. The method of claim 57, wherein said thin film transistor is a top-gate type thin film transistor.

64. The method of claim 57, wherein said laser light is a pulsed excimer laser.

65. The method of claim 64, wherein said step of irradiating comprises pulsing said excimer laser ten times.

66. The method of claim 57, wherein said thin film transistor is one of a column driver and a scan driver.

67. A method for fabricating a thin film transistor device having a polycrystalline semiconductor thin film to form a channel region, and a gate electrode which intersects the channel

region, comprising the steps of:

forming a structure comprising an amorphous semiconductor thin film separated by a gate insulating layer from a gate electrode on an insulating substrate;

irradiating the amorphous semiconductor thin film with an energy beam having an elongated irradiation area to convert the amorphous semiconductor thin film into a polycrystalline semiconductor thin film while relatively moving said energy beam along a scan direction which is orthogonal to the gate electrode and is parallel to the channel region.

68. A method according to claim 67, wherein said irradiation step is a process for irradiating an amorphous semiconductor thin film to form a polycrystalline semiconductor thin film of the thin film transistor connected to a pixel electrode formed on the insulating substrate.

69. A method according to claim 67, wherein said irradiation step is a process for irradiating an amorphous semiconductor thin film to form a polycrystalline semiconductor thin film of the thin film transistor comprised of a peripheral driving circuit for an active matrix display.

70. A method according to claim 67, wherein said irradiation step is performed by moving the energy beam.

71. A method according to claim 67, wherein said irradiation step is performed by partially overlapping irradiation of the energy beam.

72. A method according to claim 67, further comprising steps of:

forming source and drain regions which comprise doping an impurity to the polycrystalline semiconductor thin film; and

activating the doped impurity by irradiating an energy beam.--